

REMARKS

This Amendment and Response and the following remarks are intended to fully respond to the Final Office Action mailed November 19, 2008. In that Office Action, claims 1-3, 5-7, 20, 22-25, and 30-49 were pending, and claims 1-3, 5-7, 20, 22-25, and 40-49 were rejected. Claims 30-39 remain withdrawn from consideration. More specifically, claims 1-3, 5-7, 20, 22-25, 43-45, and 47-49 were rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 5,506,838 to Flanagan. Claims 40-42 and 46 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Flanagan in view of U.S. Patent No. 5,471,580 to Fujiwara et al. (hereinafter, “Fujiwara”). Reconsideration of these rejections, as they might apply to the original and amended claims in view of these remarks, is respectfully requested.

In this Amendment and Response, claims 1, 20, 24, 25, and 46-49 have been amended. Claims 4, 8-19, 21, and 26-29 remain cancelled, and claims 30-39 remain withdrawn. No claims have been added. Therefore, claims 1-3, 5-7, 20, 22-25, and 40-49 remain present for examination. Claims 1-3, 5-7, 20, 22-25, and 40-49 are in condition for allowance, and such action is respectfully requested.

Claim Rejections – 35 U.S.C. § 102(b): Claims 1-3, 5-7, 20, 22-25, 43-45, and 47-49

Claims 1-3, 5-7, 20, 22-25, 43-45, and 47-49 were rejected under 35 U.S.C. § 102(b) as being anticipated by Flanagan. The Applicants respectfully disagree and traverse the rejections. To anticipate under 35 U.S.C. § 102(b), a single prior art reference must show each and every limitation of the claimed invention. *See, e.g., Massey v. Del Lab.*, 118 F.3d 1568, 1573 (Fed. Cir. 1997). Flanagan fails to teach each and every aspect of the claim elements. Further, in the interest of forwarding this application to allowance, the Applicants have provided further claim amendments. Accordingly, the application is in condition for allowance, and Applicants respectfully request such action.

With respect to claim 1, for example, Flanagan fails to teach at least:

...

for the first node, creating a partial view, wherein *the partial view is specific to the first node and resides locally to the first node, and wherein the partial view identifies any two or more but less than all nodes on the network such that a second node is connected directly to the first node and a third node is connected indirectly to the first node and the nodes are distributed across the network, and such that the partial view comprises address information for at least*

one of the nodes in the partial view, wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of the message being sent to all nodes;

if the received message has not been previously received, *delivering the message to only nodes identified in the partial view of the first node. . . .*

See, e.g., claim 1, supra (as amended) (emphasis added).

The Office Action cites to Flanagan for teaching:

A method of disseminating information to a plurality of nodes, the nodes connected in a network environment, said method comprising:

receiving, at a first node, a disseminated message, the message having broadcast-type information; for the first node, creating a partial view, wherein the partial view is specific to the first node and resides locally to the first node, and identifies any two or more but less than all nodes on the network such that the nodes are connected and distributed across the network and such that the partial view comprises address information for at least one of the nodes in the partial view, wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of the message being sent to all nodes; evaluating the received message; determining if the received message has been previously received by the first node; and if the received message has not been previously received, delivering the message to only nodes identified in the partial view of the first node (see at least column 2, lines 18-64, fig. 5, abstract).

Office Action, 11/19/2008, at 2-3 (emphasis in original).

First, the Applicants respectfully submit that the Office Action's rejection of claim 1 is improper because it does not provide support element-by-element for claim 1. Instead, the Office Action provides only a general reference to "column 2, lines 18-64, fig. 5, abstract" as satisfying claim 1. As noted above, a single prior art reference *must show each and every limitation* of the claimed invention to anticipate under 35 U.S.C. § 102(b). *See, e.g., Massey v. Del Lab., 118 F.3d 1568, 1573 (Fed. Cir. 1997).* Because the Office Action makes reference to several paragraphs of Flanagan for rejecting claim 1 as a whole, the Applicants cannot understand the Office Action's rejection. Indeed, the Applicants were not able to find the particular teaching or claim terms of claim 1 in the cited portions of Flanagan. For example, the Applicants could not find in the cited portions of Flanagan any teaching of a "partial view" or ". . . wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of the message being sent to all nodes . . ." as claimed in claim 1. "The

pertinence of each reference, if not apparent, *must be clearly explained and each rejected claim specified.*” 37 C.F.R. § 1.104(c)(2) (emphasis added). The Applicants therefore respectfully request identification of the particular citations to Flanagan used for rejecting each claim element of the rejected claims. In the alternative, the Applicants respectfully request withdrawal of the § 102(b) rejections because the Office Action has failed to provide a *prima facie* case of anticipation by not showing that each and every limitation of claim 1 is satisfied by Flanagan.

Second, Flanagan fails to teach each and every limitation of claim 1. For example, Flanagan fails to teach “. . . the partial view is specific to the first node and resides locally to the first node, and wherein the partial view identifies any two or more but less than all nodes on the network such that a second node is connected directly to the first node and a third node is connected indirectly to the first node . . . wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of the message being sent to all nodes . . . if the received message has not been previously received, delivering the message to only nodes identified in the partial view of the first node. . . .” *See claim 1, supra (as amended).* The citation provided by the Office Action to Flanagan of “column 2, lines 18-64, fig. 5, abstract” fails to teach, for example, “wherein the partial view identifies any two or more but less than all nodes on the network such that a second node is connected directly to the first node and a third node is connected indirectly to the first node . . . delivering the message to only nodes identified in the partial view of the first node. . . .” *Claim 1, supra (as amended).*

Rather, Flanagan does not teach a “partial view” but, instead, teaches that “[a]n information packet is transmitted by one or more nodes *to every other node connected directly to a common data link.*” *Flanagan, at Abstract (emphasis added).* Further, Flanagan states that “[t]he packet propagation technique includes the steps of transmitting a packet *from one or more source nodes to every node connected directly to a common segment. . .* If the information is new, then the receiving node records the packet information and *forwards the packet to other nodes directly connected to the receiving node*” *Flanagan, at 2:38-41 (emphasis added).* Further, Figure 5 of Flanagan teaches that “in step 262, the modified packet is transmitted from the non-receiving port of the *receiving node to nodes to which it is directly connected*” *Flanagan, 13:28-31 (emphasis added).* Thus, Flanagan does not teach, for example, “delivering the message to only nodes identified in the partial view of the first node” wherein the partial view of the first node “identifies any two or more but less than all nodes on the network such that

a second node is connected directly to the first node and a third node is connected indirectly to the first node” Flanagan does not teach a “partial view,” as noted. Rather, Flanagan teaches that the packet information is sent to “other nodes directly connected to the receiving node.” *Flanagan*, at 2:45-46. Flanagan thus does not teach a “view,” much less a “partial view.” Instead, information is routed to directly connected nodes. Indeed, Flanagan teaches away from claim 1’s “wherein the partial view identifies . . . a second node is connected directly to the first node and a third node is connected indirectly to the first node . . . delivering the message to only nodes identified in the partial view of the first node . . .” by stating, for example, that the “receiving node records the packet information and forwards the packet to *other nodes directly connected to the receiving node . . .*” *Flanagan*, 2:44-46 (*emphasis added*). While Flanagan does not teach a “view,” as discussed *supra*, if we were to assume for the sake of argument that Flanagan does teach a “view,” Flanagan teaches a “full” view if the only nodes are those connected directly to the receiving node. In such a case, the receiving node would have a “full,” not a “partial,” view. Flanagan thus does not teach a “partial view,” much less does it teach “wherein the partial view identifies any two or more but less than all nodes on the network such that a second node is connected directly to the first node and a third node is connected indirectly to the first node . . . delivering the message to only nodes identified in the partial view of the first node” *Claim 1, supra (as amended)*.

Further, Flanagan fails to teach, for example, “. . . wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of the message being sent to all nodes . . .” as claimed in claim 1. The Applicants were not able to find any disclosure or teaching in Flanagan of determining the number of nodes “to provide a determined probability” of the message being sent to all nodes. Instead, Flanagan, as noted, teaches “the receiving node records the packet information and *forwards the packet to other nodes directly connected to the receiving node . . .*” *Flanagan*, 2:43-45. There is no determination in Flanagan of a “partial view,” much less of a “determined probability” of the message being sent to all nodes.

Accordingly, Flanagan fails to teach each and every limitation of claim 1. As such, no *prima facie* case of anticipation under 35 U.S.C. § 102(b) can be established. Claim 1 is therefore allowable for at least the reasons set forth above. Because claims 2-3 and 5-7 depend on the allowable base claim 1, *see discussion supra*, claims 2-3 and 5-7 are also patentable over

Flanagan. As such, any remaining arguments supporting the rejections of these claims are not acquiesced to even though they are not addressed herein. While the above discussion shows that this reference does not teach the claims, amendments to claim 1 are made in the interest of forwarding this application to allowance and are not necessarily made to address the Office Action's rejections based on the cited reference. Amendments herein are therefore made without prejudice.

For at least the above reasons, claims 20, 24, and 25 are also patentable over Flanagan. Claims 20, 24 and 25 similarly include at least the following which is not taught by Flanagan:

...
store information related to other nodes in a partial view of the first node, *wherein the partial view is specific to the first node and identifies any two or more but less than all nodes on the network such that a second node is connected directly to the first node and a third node is connected indirectly to the first node* and the nodes are distributed across the network, and such that the partial view comprises address information for at least one of the nodes in the partial view, and wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of the message being sent to all nodes;

...
transmit broadcast information to only nodes indicated in the partial view if the received message has not been previously received by the first node.

See, e.g., claim 20, supra (as amended) (emphasis added).

...
each node maintaining a partial view of the entire network, such that *the partial view of a first node identifies any two or more but less than all nodes on the network such that a second node is connected directly to the first node and a third node is connected indirectly to the first node* and the nodes are distributed across the network, and such that the partial view comprises address information for at least one of the nodes in the partial view, wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of a message being sent to all nodes; and

each node gossips only to nodes identified in each node's partial view.

See, e.g., claim 24, supra (as amended) (emphasis added).

...
wherein the first and second identification fields represent a partial view of the network environment, wherein *the partial view of a first node identifies any two or more but less than all nodes on the network such that a second node is connected directly to the first node and a third node is connected indirectly to the first node* and the nodes are distributed across the network, and such that the

partial view comprises address location information for at least one of the nodes in the partial view, wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of a message being sent to all nodes;

...
wherein a message received at the first node is delivered to only nodes identified in the partial view of the first node if the received message has not been previously received by the first node.

*See, e.g., claim 25, *supra* (as amended) (emphasis added).*

As such, claims 20, 24 and 25 are allowable over Flanagan for at least the reasons set forth above. Because claims 22-23, 43-45, and 47-49 depend from allowable base claims 20, 24 and 25, respectively, these claims are also patentable over Flanagan. Allowance of claims 22-23, 43-45, and 47-49 is therefore respectfully requested. As such, any remaining arguments supporting the rejections of claims 22-23, 43-45, and 47-49 are not acquiesced to even though they are not addressed herein.

For at least the above reasons, the Applicants respectfully request the allowance of claims 1-3, 5-7, 20, 22-25, 43-45, and 47-49.

Claim Rejections – 35 U.S.C. § 103(a): Claims 40-42 and 46

Claims 40-42 and 46 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Flanagan in view of Fujiwara. The Applicants respectfully disagree and traverse these § 103(a) rejections. Because claims 40-42 and 46 depend from allowable base claims 1, 20, 24, and 25 respectively, *see discussion supra*, claims 40-42 and 46 are patentable over Flanagan in view of Fujiwara. Allowance of claims 40-42 and 46 is therefore respectfully requested. As such, any remaining arguments supporting the rejections of claims 40-42 and 46 are not acquiesced to even though they are not addressed herein. Further, Flanagan in view of Fujiwara fail to teach or disclose, at a minimum, the following elements, and elements related thereto, as discussed above:

...
for the first node, creating a partial view, wherein the partial view is specific to the first node and resides locally to the first node, and wherein the partial view identifies any two or more but less than all nodes on the network such that a second node is connected directly to the first node and a third node is connected indirectly to the first node and the nodes are distributed across the

network, and such that the partial view comprises address information for at least one of the nodes in the partial view, wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of the message being sent to all nodes;

...
if the received message has not been previously received, delivering the message to only nodes identified in the partial view of the first node. . . .

See, e.g., claim 1, supra, as amended (upon which claim 40 depends).

...
store information related to other nodes in a partial view of the first node, wherein the partial view is specific to the first node and identifies any two or more but less than all nodes on the network such that a second node is connected directly to the first node and a third node is connected indirectly to the first node and the nodes are distributed across the network, and such that the partial view comprises address information for at least one of the nodes in the partial view, and wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of the message being sent to all nodes;

...
transmit broadcast information to only nodes indicated in the partial view if the received message has not been previously received by the first node.

See, e.g., claim 20, supra, as amended (upon which claim 41 depends).

...
each node maintaining a partial view of the entire network, such that the partial view of a first node identifies any two or more but less than all nodes on the network such that a second node is connected directly to the first node and a third node is connected indirectly to the first node and the nodes are distributed across the network, and such that the partial view comprises address information for at least one of the nodes in the partial view, wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of a message being sent to all nodes; and

each node gossips only to nodes identified in each node's partial view.

See, e.g., claim 24, supra, as amended (upon which claim 42 depends).

...
wherein the first and second identification fields represent a partial view of the network environment, wherein the partial view of a first node identifies any two or more but less than all nodes on the network such that a second node is connected directly to the first node and a third node is connected indirectly to the first node and the nodes are distributed across the network, and such that the partial view comprises address location information for at least one of the nodes in the partial view, wherein the number of nodes identified in the partial view is

determined in order to provide a determined probability of a message being sent to all nodes;

... wherein a message received at the first node is delivered to only nodes identified in the partial view of the first node if the received message has not been previously received by the first node.

See, e.g., claim 25, supra, as amended (upon which claim 46 depends).

Flanagan, as discussed above, fails to teach at least: "... the partial view is specific to the first node and resides locally to the first node, and wherein the partial view identifies any two or more but less than all nodes on the network such that a second node is connected directly to the first node and a third node is connected indirectly to the first node . . . wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of the message being sent to all nodes . . . if the received message has not been previously received, delivering the message to only nodes identified in the partial view of the first node." *See claim 1, supra (as amended); see also claims 20, 24-25.* Further, Fujiwara fails to teach or disclose a "partial view," much less "wherein the partial view identifies any two or more but less than all nodes on the network such that a second node is connected directly to the first node and a third node is connected indirectly to the first node . . . wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of the message being sent to all nodes . . . if the received message has not been previously received, delivering the message to only nodes identified in the partial view of the first node." Rather, Fujiwara relates to providing a hierarchical network topology, including an evaluation of the number of links and average transfer distances, for example. *See, e.g., Fujiwara, at 4:28-36; 14:15-15:15.* Claims 40-42 and 46 are therefore patentable over Flanagan in view of Fujiwara, and allowance of these claims is respectfully requested.

The Applicants thus respectfully request reconsideration of the rejections to claims 40-42 and 46 in light of the arguments presented above, at a minimum. Allowance of these claims is respectfully requested.

Conclusion

This Amendment and Response fully responds to the Final Office Action mailed November 19, 2008. It is recognized that the Office Action may contain arguments and rejections that are not directly addressed by this Amendment and Response due to the fact that they are rendered moot in light of the preceding arguments in favor of patentability. Hence, the failure, if any, of this Amendment and Response to directly address an argument raised by the Examiner should not be interpreted as reflecting the Applicants' belief that such argument has merit. Furthermore, the claims of the present application may include other elements, not discussed in this Amendment and Response, which are not shown, taught, or otherwise suggested by the art of record. Accordingly, the preceding arguments in favor of patentability are advanced without prejudice to other bases of patentability.

It is believed that no further fees are due with this Amendment and Response to the Final Office Action. However, the Commissioner is hereby authorized to charge any deficiencies or credit any overpayment with respect to this patent application to deposit account number 13-2725.

In light of the above remarks and amendments, it is believed that the application is in condition for allowance, and such action is respectfully requested. Should any additional issues need to be resolved, the Examiner is requested to telephone the undersigned to attempt to resolve those issues.

Respectfully submitted,

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